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10524-003 (new)
Application Serial No. 09/981,685

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. cancelled
2. cancelled
3. (previously presented) An adenovirus comprising an inserted expression cassette comprising a promoter sequence, a coding sequence of a gene, and a transcription termination site, and site-specific recombinase target sites positioned to remove or invert a portion of the expression cassette, whereby recombination between said target sites mediated by a site-specific recombinase alters expression of the coding sequence of the gene.
4. (previously presented) An adenovirus comprising an inserted expression cassette comprising a promoter sequence, a coding sequence of a gene, and a transcription termination site, and site-specific recombinase target sites flanking the promoter sequence of said expression cassette that promotes expression of the gene, whereby recombination between said target sites mediated by a site-specific recombinase removes the promoter sequence, resulting in decreased expression of the coding sequence of the gene.
5. (previously presented) The adenovirus of claim 4, wherein the coding sequence of the gene is from a non-adenoviral source.
6. (previously presented) An adenovirus comprising an inserted expression cassette comprising a promoter sequence, a coding sequence of a gene, and a transcription termination site, the promoter sequence directed away from said gene, and two site-specific recombinase target sites flanking said promoter sequence but oriented in opposite orientation to one another, whereby recombination between said target sites mediated by a site-specific recombinase inverts the promoter sequence, resulting in increased expression of the coding sequence of the gene.

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7. (previously presented) The adenovirus of claim 6, wherein the coding sequence of the gene is from a non-adenoviral source.

8. (previously presented) An adenovirus comprising an inserted expression cassette comprising a promoter sequence, a coding sequence of a gene, a DNA spacer sequence located between the promoter sequence and the coding sequence, and a transcription termination site, and site-specific recombinase target sites flanking the DNA spacer sequence, whereby recombination between said target sites mediated by a site-specific recombinase removes the DNA spacer sequence, resulting in increased expression of the coding sequence of the gene.

9. (previously presented) The adenovirus of claim 8, wherein the coding sequence of the gene is from a non-adenoviral source.

10. (currently amended) An adenovirus comprising an inserted expression cassette comprising a promoter sequence, a coding sequence of a gene, and a transcription termination site, and site-specific recombinase target sites flanking the coding sequence of the gene, whereby recombination between said target sites mediated by a site-specific recombinase removes the coding sequence, resulting in decreased expression of the coding sequence of the gene.

11. (previously presented) The adenovirus of claim 10, wherein the coding sequence of the gene is from a non-adenoviral source.

12. (currently amended) An adenovirus comprising an inserted expression cassette comprising a promoter sequence, a coding sequence of a gene, and a transcription termination site, a portion of said expression cassette comprising the coding sequence oriented in an opposite direction to normal translation of the coding sequence of the gene, and two site-specific recombinase target sites flanking said coding sequence but oriented in opposite orientation to one another, whereby recombination between said target sites mediated by a site-specific recombinase inverts the coding sequence, resulting in increased expression of the coding sequence of the gene.

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13. (previously presented) The adenovirus of claim 12, wherein the coding sequence of the gene is from a non-adenoviral source.

14. (currently amended) An adenovirus comprising a promoter sequence, a coding sequence of a gene, a transcription termination site, and site-specific recombinase target sites flanking the coding sequence of the gene, whereby recombination between said target sites mediated by a site-specific recombinase removes the coding sequence of the gene, resulting in decreased expression of the gene.

15. (previously presented) The adenovirus of claim 14, wherein the coding sequence of the gene is from a non-adenoviral source.

16. (previously presented) An adenovirus comprising a promoter sequence, a coding sequence of a gene, and a transcription termination site, said coding sequence of the gene oriented in an opposite direction to normal translation of the gene, and two site-specific recombinase target sites flanking said coding sequence of the gene but oriented in opposite orientation to one another, whereby recombination between said target sites mediated by a site-specific recombinase inverts the gene, resulting in increased expression of the coding sequence of the gene.

17. (previously presented) The adenovirus of claim 16, wherein the coding sequence of the gene is from a non-adenoviral source.